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EXAMINER

GAUTHIER, GERALD

ART UNIT

PAPER NUMBER

2645

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/635,165

Applicant(s)

ZHANG ET AL.

Examiner

Gerald Gauthier

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. **Claims 1-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Daudelin (US 4,959,855) in view of Infosino (US 6,327,346).

Regarding **claim 1**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed "a network for providing a telecommunications service with automatic speech recognition to a telecommunications user"), comprising:

a switch (30 on FIG. 1) in communication with a telecommunications device associated with the telecommunications user (40 on FIG. 1) for detecting a trigger specific (column 4, line 9 "channel signaling") to the service in response to a communication from the telecommunications device (column 4, line 10 "to initiate the setting up of the connection") and for routing the communication to an operator services system (56 on FIG. 1) in response to detection of the trigger (column 4, lines 6-25) [The switch is used for conveying common channel signaling messages to initiate the setting up connection between customer terminals and the directory assistance service]; and

an intelligent resource server (1 on FIG. 1) in communication with the switch for receiving via the switch the communication from the operator services system with a message including information regarding a party (column 4, line 56, "to identify the correct listing") requested by the telecommunication user from the operator services system, for playing an audible message for the telecommunications user (column 4, line 58 "announced to the customer") in response to receiving the communication, the audible message containing the information regarding the party (column 4, line 57 "a statement that the number") and prompting the telecommunications user to place an outgoing communication (column 6, line 36 "a prompt announcement") to the party (column 6, lines 27-46) [The switch 1 prompt the customer asking for the type of special service desired such as call setup and the customer's response is monitored].

Daudelin fails to disclose automatically recognizing a predetermined keyword spoken.

However, Infosino teaches automatically recognizing a predetermined keyword spoken (column 4, line 45 "voice pattern features") by the telecommunications user (column 4, line 48 "the user") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the telecommunications user's response (column 4, line 47 "extracted voice pattern features") and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claims 2 and 9**, Daudelin discloses wherein the switch includes a switch of a central office in communication with the telecommunications device via a subscriber line (column 3, lines 52-67).

Regarding **claims 3 and 10**, Infosino teaches wherein the switch includes a switch of a mobile switching center in communication with the telecommunications device via an air interface communication scheme (column 2, lines 27-34).

Regarding **claims 4 and 11**, Daudelin discloses, wherein the switch is further for detecting an originating trigger in response to a feature code entered by the telecommunications user from the telecommunications device (column 4, lines 6-25).

Regarding **claims 5 and 12**, Daudelin discloses a service control point in communication with the switch for routing the communication from the telecommunications device to the operator services system upon detecting the originating trigger, and for routing the communication from the operator services system to the intelligent resource server via the switch (column 3, lines 20-35).

Regarding **claims 6, 13, 21 and 26**, Daudelin discloses wherein the intelligent resource server is further for placing the outgoing communication to the party based on recognition of the predetermined keyword (column 8, lines 27-47).

Regarding **claims 7, 14, 15, 18, 19, 22, 23, 27 and 28**, Daudelin discloses, wherein the intelligent resource server is further for placing the outgoing communication to the party based on recognition of a predetermined DTMF character entered by the telecommunications user (column 8, lines 27-47).

Regarding **claim 8**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed “a network for providing a telecommunications service with automatic speech recognition to a telecommunications user”), comprising:

a switch (30 on FIG. 1) in communication with a telecommunications device associated with the telecommunications user (40 on FIG. 1) for detecting a trigger specific (column 4, line 9 “channel signaling”) to the service in response to a communication from the telecommunications device (column 4, line 10 “to initiate the setting up of the connection”) and for routing the communication to an operator services system (56 on FIG. 1) in response to detection of the trigger (column 4, lines 6-25) [The switch is used for conveying common channel signaling messages to initiate the setting up connection between customer terminals and the directory assistance service];

a call-processing module (12 on FIG. 1) in communication with the switch for receiving via the switch the communication from the operator services system with a message including information regarding a party requested (column 4, line 56, “to identify the correct listing”) by the telecommunication user from the operator services system (column 4, lines 49-65) [The switch network received the announcement from the audio response unit regarding the customer request]; and

an enunciation module (14 on Fig.1) in communication with the call processing module for playing an audible message for the telecommunications user (column 6, line 36 “a prompt announcement”) in response to receiving the communication, the audible message containing the information regarding the party and prompting the

telecommunications user to place an outgoing communication to the party (column 6, lines 27-46) [The switch 1 prompt the customer asking for the type of special service desired such as call setup and the customer's response is monitored].

Daudelin fails to disclose automatically recognizing a predetermined keyword spoken.

However, Infosino teaches an automatic speech recognition module (230 on FIG. 2) in communication with the switch for recognizing a predetermined keyword spoken (column 4, line 45 "voice pattern features") by the telecommunications user (column 4, line 48 "the user") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 16**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed “an intelligent resource server for providing a telecommunications service with automatic speech recognition for a telecommunications user”), comprising:

a call processing module (12 on FIG. 1) for receiving via a switch (30 on FIG. 1) in communication with a telecommunications device (40 on FIG. 1) associated with the telecommunications user a communication from an operator services system (56 on FIG. 1) with a message including information regarding a party about whom the telecommunications user requested information (column 4, line 56, “to identify the correct listing”) from the operator services system (column 4, lines 49-65) [The switch network received the announcement from the audio response unit regarding the customer request];

an enunciation module in communication with the call processing module for playing an audible message for the telecommunications user in response to receiving the communication, the audible message containing the information regarding the party and prompting the telecommunications user to place an outgoing communication to the party an enunciation module (14 on Fig.1) in communication with the call processing module for playing an audible message for the telecommunications user (column 6, line 36 “a prompt announcement”) in response to receiving the communication, the audible message containing the information regarding the party and prompting the telecommunications user to place an outgoing communication to the party (column 6,

lines 27-46) [The switch 1 prompt the customer asking for the type of special service desired such as call setup and the customer's response is monitored].

Daudelin fails to disclose automatically recognizing a predetermined keyword spoken.

However, Infosino teaches an automatic speech recognition module (230 on FIG. 2) in communication with the switch for recognizing a predetermined keyword spoken (column 4, line 45 "voice pattern features") by the telecommunications user (column 4, line 48 "the user") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 17**, Daudelin discloses wherein the call-processing module is further for placing the outgoing communication to the party based on recognition of the predetermined keyword by the automatic speech recognition module in response to the audible message (column 8, lines 27-47).

Regarding **claim 20**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed "a method for providing a telecommunications service with automatic speech recognition to a telecommunications user"), comprising:

detecting a communication (column 5, line 63 "connected to a directory assistance") from the telecommunications user (column 5, lines 60-68) [The calling customer is connected to a directory assistance service switch];

providing information requested by the telecommunications user regarding a party (column 4, line 56, "to identify the correct listing") upon detection of the communication (column 4, lines 49-65) [The switch network received the announcement from the audio response unit regarding the customer request]; and

playing an audible message for the telecommunications user containing the information regarding the party (column 6, line 36 "a prompt announcement") and prompting the telecommunications user to place an outgoing communication to the party (column 6, lines 27-46) [The switch 1 prompt the customer asking for the type of special service desired such as call setup and the customer's response is monitored].

Daudelin fails to disclose automatically recognizing a predetermined keyword spoken.

However, Infosino teaches recognizing a predetermined keyword spoken by the telecommunications user (column 4, line 45 "voice pattern features") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 24**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed "a network for providing a telecommunications service with automatic speech recognition to a telecommunications user"), comprising:

means for detecting a communication (column 5, line 63 "connected to a directory assistance") from the telecommunications user (column 5, lines 60-68) [The calling customer is connected to a directory assistance service switch];

means for playing an audible message for the telecommunications user containing information regarding a party (column 6, line 36 "a prompt announcement") and prompting the telecommunications user to place an outgoing communication to the party (column 6, lines 27-46) [The switch 1 prompt the customer asking for the type of special service desired such as call setup and the customer's response is monitored].

Daudelin fails to disclose automatically recognizing a predetermined keyword spoken.

However, Infosino teaches means for recognizing a predetermined keyword spoken by the telecommunications user (column 4, line 45 "voice pattern features") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 25**, Daudelin discloses means for providing information requested by the telecommunications user regarding the party upon detection of the communication (column 7, lines 37-45).

Response to Arguments

4. Applicant's arguments with respect to **claims 1-28** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Gauthier whose telephone number is (703) 305-0981. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.


g.g.
July 30, 2003

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

